

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

REMARKS

Claims 1-35 are pending herein.

Claims 14, 19-29 and 35 stand allowed.

Claims 1-13, 15-18 and 30-34 are rejected.

CLAIM REJECTIONS UNDER 35 U.S.C. 103

Claims 1-3, 6, 10, 12, 13, 17 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda, JP-11-093670, in view of Yoshida, et al., U.S. pat. no. 5,096,013, on the grounds that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Takeda with an inner noise silencer, thereby providing the advantage of absorbing sound over a relatively wide frequency band, as taught by Yoshida, et al.

It is respectfully submitted that the Takeda and Yoshida patents, taken alone or in combination with each other, fail to render claims 1-3, 6, 10, 12, 13, 17 and 32 obvious within the contemplation of 35 U.S.C. 103(a), since those patents fail to teach or suggest all of the limitations of those claims, as hereinafter discussed in detail.

Takeda in view of Yoshida does not teach the invention of claims 1-3, 6, 10, 12 and 13

It is respectfully submitted that the Takeda and Yoshida patents, taken alone or in combination with each other, fail to teach or suggest all of the limitations of amended claim 1, and claims 2, 3, 6, 10, 12 and 13 as dependent therefrom, since those patents fail to teach or suggest a system comprising "at least one inner noise silencer disposed in the airflow, said at least one inner noise silencer having at least one cavity and at least one opening communicating with said at least one cavity", in combination with the remaining elements recited in amended claim 1.

It is therefore respectfully submitted that claim 1 as amended overcomes the basis for the rejection of claims 1-3, 6, 10, 12 and 13 under 35 U.S.C. 103(a). Reconsideration and allowance of claims 1-3, 6, 10, 12 and 13 is therefore respectfully solicited.

Takeda in view of Yoshida does not teach the invention of claims 17 and 32

It is further respectfully submitted that the Takeda and Yoshida patents, taken alone or in combination with each other, fail to teach or suggest all of the limitations of amended claim 17 and claim 32 as dependent therefrom, since those patents fail to teach or suggest a system comprising "an inner barrel with at least one cavity and at least one opening attached to the air-moving device", in combination with the remaining elements

U.S.S.N. 10/063,151

recited in amended claim 17.

It is therefore respectfully submitted that claim 17 as amended overcomes the basis for the rejection of claims 17 and 32 under 35 U.S.C. 103(a). Reconsideration and allowance of claims 17 and 32 is therefore respectfully solicited.

Claims 4, 9, 11, 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda and Yoshida et al, as applied to claims 1 and 17 above, and further in view of Ngo, U.S. pat. no. 6,244,817, on the grounds that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Takeda and Yoshida, et al as described above, thereby providing the advantage of inhibiting upstream flow and inhibiting two types of noise, as taught by Ngo.

It is respectfully submitted that claims 4, 9, 11, 31 and 33 are not rendered obvious by the Takeda, Yoshida and Ngo patents, taken alone or in combination with each other, within the contemplation of 35 U.S.C. 103(a), since those patents fail to teach or suggest all of the limitations of those claims, as hereinafter discussed in detail.

Takeda in view of Yoshida and Ngo does not teach the invention of claims 4, 9 and 11

It is respectfully submitted that the Takeda, Yoshida and Ngo patents, taken alone or in combination with each other, fail

teach or suggest all of the limitations of claims 4, 9 and 11 as dependent from amended claim 1, since those patents fail to teach or suggest a system comprising "at least one inner noise silencer disposed in the airflow, said at least one inner noise silencer having at least one cavity and at least one opening communicating with said at least one cavity", in combination with the remaining elements recited in amended claim 1.

It is therefore respectfully submitted that amended claim 1 overcomes the basis for the rejection of claims 4, 9 and 11 as dependent therefrom under 35 U.S.C. 103(a). Reconsideration and allowance of claims 4, 9 and 11 is therefore respectfully solicited.

Takeda in view of Yoshida and Ngo does not teach the invention of claims 31 and 33

It is further respectfully submitted that the Takeda, Toshida and Ngo patents, taken alone or in combination with each other, fail to teach or suggest all of the limitations of claims 31 and 33 as dependent from amended claim 17, since those patents fail to teach or suggest a system comprising "an inner barrel with at least one cavity and at least one opening attached to the air-moving device", in combination with the remaining elements recited in amended claim 17.

It is therefore respectfully submitted that amended claim 17 overcomes the basis for the rejection of claims 31 and 33 as

U.S.S.N. 10/063,151

dependent therefrom, under 35 U.S.C. 103(a). Reconsideration and allowance of claims 31 and 33 is therefore respectfully solicited.

Claims 5, 7, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda and Yoshida, et al as applied to claim 1 above, and further in view of Ritenour, U.S. pat. no. 4,692,091, on the grounds that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Takeda and Yoshida et al so the outer barrel is both upstream and downstream of the air-moving device and so the cavities further comprise steel wool sound absorbing material, thereby providing the advantage of further damping noise and vibration, as taught by Ritenour.

It is respectfully submitted that the Takeda, Yoshida and Ritenour patents, taken alone or in combination with each other, fail to render claims 5, 7, 15 and 16 as dependent from amended claim 1 obvious within the contemplation of 35 U.S.C. 103(a), since those patents fail to teach or suggest the limitations of claims 5, 7, 15 and 16 as dependent from amended claim 1, as follows.

It is respectfully submitted that the Takeda, Yoshida and Ritenour patents, taken alone or in combination with each other, fail to to teach or suggest a system comprising "at least one

U.S.S.N. 10/063,151

inner noise silencer disposed in the airflow, said at least one inner noise silencer having at least one cavity and at least one opening communicating with said at least one cavity", in combination with the remaining elements recited in amended claim 1 and therefore, claims 5, 7, 15 and 16 as dependent from amended claim 1.

It is therefore respectfully submitted that amended claim 1 overcomes the basis for the rejection of claims 5, 7, 15 and 16 as dependent therefrom under 35 U.S.C. 103(a). Reconsideration and allowance of claims 5, 7, 15 and 16 is therefore respectfully solicited.

Claims 8 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda and Yoshida et al as applied to claims 1 and 17 above, and further in view of Periyathamby, et al, U.S. pat. no. 6,309,176, on the grounds that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Takeda and Yoshida, et al so the outer noise silencers are Helmholtz resonators, thereby providing the advantage of reducing passing blade passing tone, as taught by Periyathamby.

It is respectfully submitted that the Takeda, Yoshida and Periyathamby patents, taken alone or in combination with each other, fail to render claims 8 and 30 obvious within the contemplation of 35 U.S.c. 103(a), since those patents fail to

U.S.S.N. 10/063,151

teach or suggest all of the limitations of claim 8 as dependent from amended claim 1, and the limitations of claim 30 as dependent from amended claim 17, as hereinafter discussed in detail.

Takeda in view of Yoshida and Periyathamby does not teach invention of claim 8

It is respectfully submitted that the Takeda, Yoshida and Periyathamby patents, taken alone or in combination with each other, fail to teach or suggest a system comprising "at least one inner noise silencer disposed in the airflow, said at least one inner noise silencer having at least one cavity and at least one opening communicating with said at least one cavity", in combination with the remaining elements recited in amended claim 1.

It is therefore respectfully submitted that claim 8, as dependent from amended claim 1, overcomes the basis for the rejection of claim 8 under 35 U.S.C. 103(a). Reconsideration and allowance of claim 8 is therefore respectfully solicited.

Takeda in view of Yoshida and Periyathamby does not teach invention of claim 30

It is further respectfully submitted that the Takeda, Yoshida and Periyathamby patents, taken alone or in combination with each other, fail to teach or suggest a system comprising "an

inner barrel with at least one cavity and at least one opening attached to the air-moving device", in combination with the remaining elements recited in amended claim 17.

It is therefore respectfully submitted that claim 30, as dependent from amended claim 17, overcomes the basis for the rejection of claim 30 under 35 U.S.C. 103(a). Reconsideration and allowance of claim 30 is therefore respectfully solicited.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda and Yoshida et al as applied to claim 1 above, and further in view of Takeshita, U.S. pat. no. 6,390,770, on the grounds that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Takeda and Yoshida et al with a pipe, thereby providing the advantage of sizing the damping means for specific space restrictions, as taught by Takeshita.

It is respectfully submitted that the Takeda, Yoshida and Takeshita patents, taken alone or in combination with each other, fail to render applicant's claim 18 as dependent from amended claim 1, obvious within the contemplation of 35 U.S.C. 103(a), since those patents fail to teach or suggest a system comprising "at least one inner noise silencer disposed in the airflow, said at least one inner noise silencer having at least one cavity and at least one opening communicating with said at least one cavity", in combination with the remaining elements recited in

U.S.S.N. 10/063,151

amended claim 1.

It is therefore respectfully submitted that amended claim 1 overcomes the basis for the rejection of claim 18, as dependent therefrom, under 35 U.S.C. 103(a). Reconsideration and allowance of claim 18 is therefore respectfully solicited.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda in view of Takeshita, on the grounds that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Takeda with a pipe, thereby providing the advantage of sizing the damping means for specific space restrictions, as taught by Takeshita.

It is respectfully submitted that the Takeda and Takeshita patents, taken alone or in combination with each other, fail to render applicant's claim 34 obvious within the contemplation of 35 U.S.C. 103(a), since those patents fail to teach or suggest an article of manufacture comprising "at least one pipe extending radially between and communicating with the opening through the outer barrel and the hollow cavity", in combination with the remaining elements recited in amended claim 34.

Reference is made to col. 9, lines 45-48 of the Takeshita patent, where it is stated, "However, since the bottom-closed pipes 40A are each closed at its bottom end, the air flow having entered each pipe is turned by the closed bottom end and returns

U.S.S.N. 10/063,151

toward the fan 11 again". Accordingly, the Takeshita patent fails to teach or suggest providing at least one pipe in communication with a hollow cavity and an opening in an outer barrel, as recited in claim 34, as the bottom end of each of the pipes (40A) disclosed in the Takeshita patent is closed, rather than open.


Therefore, it is respectfully submitted that claim 34 is not made obvious by the Takeda or Takeshita patents, taken alone or in combination with each other, within the contemplation of 35 U.S.C. 103(a). Reconsideration and allowance of claim 34 is therefore respectfully solicited.

Claims 14, 19-29 and 35 stand allowed.

Conclusion

Every effort has been made to amend applicant's claims in order to define his invention in the scope to which it is entitled. Accordingly, reconsideration and allowance of claims 1-13, 15-18 and 30-34 is respectfully solicited.

Respectfully submitted,



Randy W. Tung
Reg. No. 31,311